Docket No. A-3-4

Philip E. EGGERS et al. Application No.: 10/627,313

Response to Office Action Mailed 04/07/2005

Page 3

CLAIMS

1. -53. (Canceled.)

54. (Previously presented) A surgical instrument for applying high frequency electrical energy to tissue at a target site comprising:

a shaft having a proximal end and a distal end:

an electrode terminal having an active electrode surface at or near the distal end of the shaft, the active electrode surface comprising a hemispherical geometry;

an electrode support that holds the electrode terminal; and

a connector extending from the electrode terminal to the proximal end of the shaft.

- 55. (Previously presented) The surgical instrument of claim 54 further comprising a return electrode positioned on the shaft proximal to the electrode terminal.
- 56. (Previously presented) The surgical instrument of claim 54 wherein the return electrode is a substantially annular band positioned proximal to the electrode terminal.
- 57. (Previously presented). The surgical instrument of claim 54 wherein a distal portion of the shaft is bent.
- 58. (Previously presented) The surgical instrument of claim 57 wherein a distal portion includes a bend of 10-30 degrees.
- 59. (Previously presented) The surgical instrument of claim 54 wherein the electrode terminal has a tissue treatment surface adapted to minimize dissociation and breakdown of collagen fibers in the tissue and to minimize ablation of tissue surrounding the collagen fibers

Philip E. EGGERS et al. Application No.: 10/627,313

shaft.

Docket No. A-3-4

Response to Office Action Mailed 04/07/2005 Page 4

- 60. (Previously presented) The surgical instrument of claim 56 wherein the tissue treatment surfaces of the electrode terminal has a surface area less than about 1 mm².
- 61. (Previously presented) The surgical instrument of claim 54 wherein said electrode support comprises an inorganic material.
- 62. (Previously presented) The surgical instrument of claim 61 wherein said inorganic material is glass.
- 63. (Previously presented) The surgical instrument of claim 61 wherein said inorganic material comprises a ceramic.
- 64. (Previously presented) The surgical instrument of claim 63 wherein said inorganic material further comprises glass.
- 65. (Previously presented) A surgical instrument for applying high frequency electrical energy to tissue at a target site comprising:
 - a shaft having a proximal end and a distal end;
 - a hemispherical-shaped electrode terminal;
 - an annular return electrode spaced proximally from said electrode terminal; and a connector extending from the electrode terminal to the proximal end of the
- 66. (Previously presented) The surgical instrument of claim 65 further comprising an electrode support configured to hold the electrode terminal, said electrode support being non-electrically conducting.